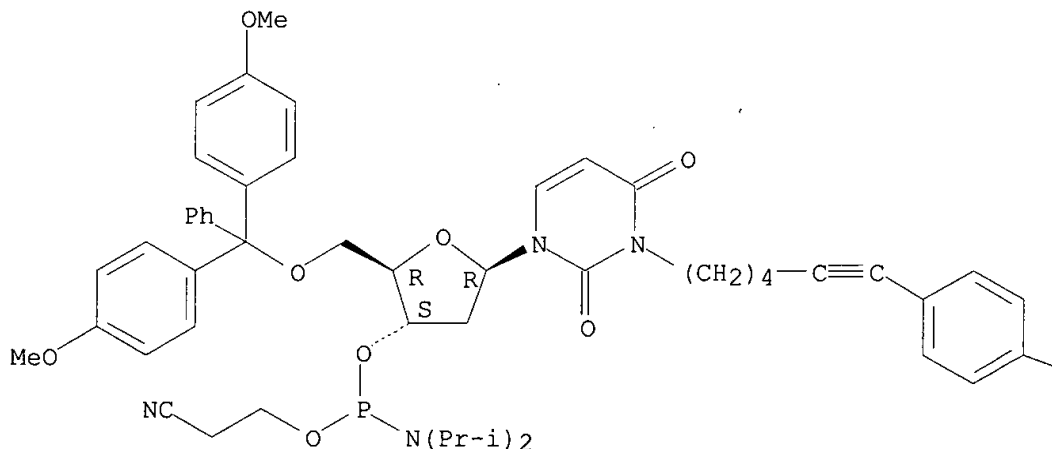


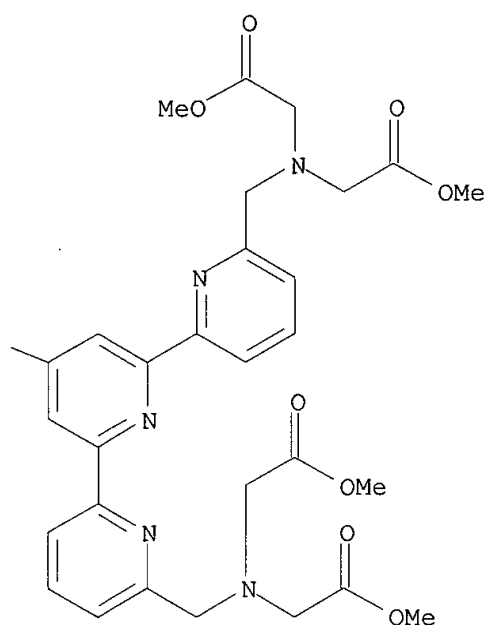
=> d 14 ibib abs hitstr

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:490069 CAPLUS
DOCUMENT NUMBER: 135:242452
TITLE: Versatile Strategy for Oligonucleotide Derivatization.
Introduction of Lanthanide(III) Chelates to
Oligonucleotides
AUTHOR(S): Hovinen, Jari; Hakala, Harri
CORPORATE SOURCE: PerkinElmer Life Sciences Wallac Oy, Turku, FIN-20101,
Finland
SOURCE: Organic Letters (2001), 3(16), 2473-2476
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:242452
AB Novel nucleosidic phosphoramidite blocks were synthesized by a Mitsunobu
reaction between 2'-deoxy-5'-O-(4,4'-dimethoxytrityl)uridine and a primary
alc. contg. a conjugate group in its structure (a protected functional
group, an org. dye, or a precursor of a lanthanide(III) chelate) followed
by phosphitylation. They were used in machine-assisted DNA synthesis in
the std. manner. A slightly modified deprotection procedure was used for
the prepn. of oligonucleotide conjugates tethered to lanthanide(III)
chelates. For the latter application one non-nucleosidic block was also
synthesized.
IT **358978-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(versatile strategy for oligonucleotide derivatization introduction of
lanthanide chelates to oligonucleotides)
RN 358978-84-4 CAPLUS
CN Glycine, N,N'-[[[4'-[4-[6-[3-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-
[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-deoxy-.beta.-D-
erythro-pentofuranosyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]-1-
hexynyl]phenyl][2,2':6',2''-terpyridine]-6,6''-diyl]bis(methylene)]bis[N-
(2-methoxy-2-oxoethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT:

12

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

(FILE 'HOME' ENTERED AT 11:23:42 ON 11 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:23:52 ON 11 APR 2003

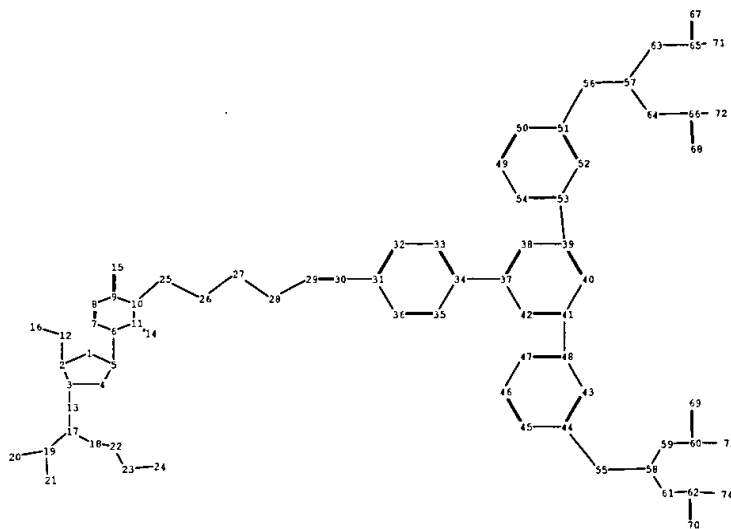
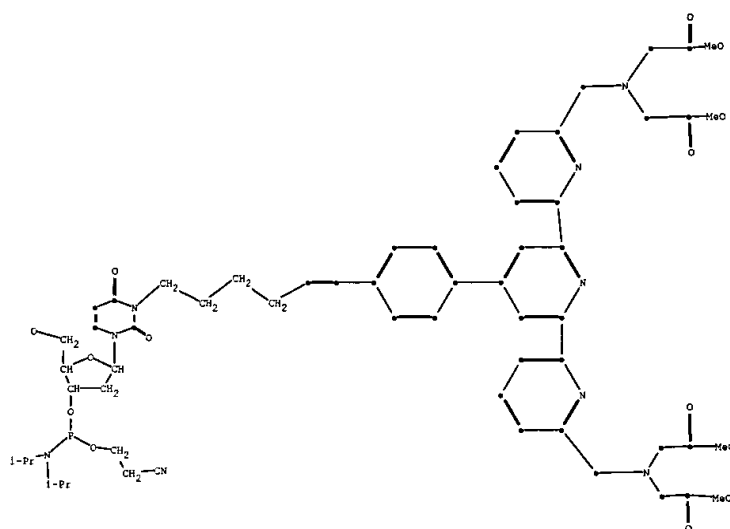
L1 STRUCTURE UPLOADED

L2 0 S L1 SSS SAM

L3 1 S L1 SSS FULL

FILE 'CAPLUS, USPATFULL, MEDLINE' ENTERED AT 11:26:13 ON 11 APR 2003

L4 1 S L3



chain nodes :

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 55 56 57
58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 31 32 33 34 35 36 37 38 39 40 41 42 43 44
45 46 47 48 49 50 51 52 53 54

chain bonds :

2-12 3-13 5-6 9-15 10-25 11-14 12-16 13-17 17-18 17-19 18-22 19-20 19-21
22-23 23-24 25-26 26-27 27-28 28-29 29-30 30-31 34-37 39-53 41-48 44-55 51-56
55-58 56-57 57-63 57-64 58-59 58-61 59-60 60-69 60-73 61-62 62-70 62-74 63-65
64-66 65-67 65-71 66-68 66-72

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 31-32 31-36 32-33 33-34
34-35 35-36 37-38 37-42 38-39 39-40 40-41 41-42 43-44 43-48 44-45 45-46 46-47
47-48 49-50 49-54 50-51 51-52 52-53 53-54

exact/norm bonds :

1-2 1-5 2-3 3-4 3-13 4-5 5-6 6-7 6-11 7-8 8-9 9-10 9-15 10-11 11-14 13-17
17-18 17-19 55-58 56-57 57-63 57-64 58-59 58-61 60-69 62-70 65-67 66-68

exact bonds :

2-12 10-25 12-16 18-22 19-20 19-21 22-23 23-24 25-26 26-27 27-28 28-29 29-30
30-31 34-37 39-53 41-48 44-55 51-56 59-60 60-73 61-62 62-74 63-65 64-66 65-71
66-72

normalized bonds :

31-32 31-36 32-33 33-34 34-35 35-36 37-38 37-42 38-39 39-40 40-41 41-42 43-44
43-48 44-45 45-46 46-47 47-48 49-50 49-54 50-51 51-52 52-53 53-54

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:Atom 19:Atom 20:Atom
21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:CLASS 28:CLASS 29:CLASS
30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:Atom 36:Atom 37:Atom 38:Atom
39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:Atom 46:CLASS 47:CLASS
48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:Atom 53:Atom 54:Atom 55:Atom 56:Atom
57:Atom

58:Atom 59:Atom 60:Atom 61:Atom 62:Atom 63:CLASS 64:CLASS 65:CLASS
66:CLASS 67:CLASS 68:CLASS 69:Atom 70:Atom 71:Atom 72:Atom 73:Atom 74:Atom